

Environmental
Restoration
Contractor

ERC Team

Interoffice Memorandum

0052036

041980

Job No. 22192
Written Response Required? NO
Closes CCN: N/A
OU: 200-ZP-1
TSD: N/A
ERA: N/A
Subject Code: 8630

TO: M. A. Buckmaster, H4-80
J. A. Lerch, B1-35

DATE: February 15, 1997

COPIES: See Below

FROM: R. T. Coffman
Onsite Measurement Services
H9-11/372-9373

SUBJECT: **200-ZP-1 PHASE II PERFORMANCE MONITORING, GROUNDWATER RESULTS, JANUARY 1997, REV 0**

REFERENCES:

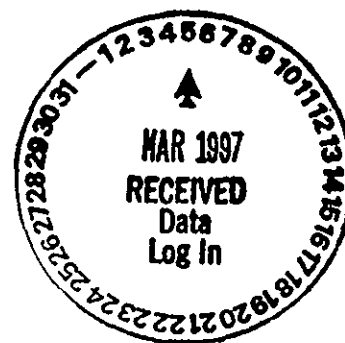
1. BHI, 1996, *On-Site Measurements Quality Assurance Plan*, BHI-00852, REV 0, Bechtel Hanford, Inc., Richland, Washington.
2. BHI, 1995, *Field Screening Procedures*, BHI-EE-05, Bechtel Hanford, Inc., Richland, Washington.
3. BHI, 1995, *200-ZP-1 Field Screening Support Logbook*, EL-1273, Bechtel Hanford, Inc., Richland, Washington.

This data package contains field screening results for groundwater samples analyzed to support 200-ZP-1 IRM Phase II performance monitoring. The Quality Assurance level for this work corresponds to QA-1 as specified in the reference 1 (BHI 1996). Samples collected and analyzed during January 1997 were managed under SAF C97-014 and C97-015. As of January 1, 1997, groundwater sampling responsibilities and oversight was transferred from the ERC, to PNNL, with Rust Federal Services performing the sample collection.

Attachment 1 contains Volatile Organic Compound (VOC) results for groundwater samples collected to support the referenced project. The VOC results were generated using a Hewlett Packard 5890 gas chromatograph with a headspace autosampler operated in accordance with Field Screening Procedure (FSP) 1.1, *Aqueous Headspace Analysis of Volatile Organic Compounds in Water* (BHI 1995). Information concerning operation and calibration of the gas chromatograph is contained in the instrument logbook EL-1329. Please contact me if you have any questions on this information.


R. T. Coffman, Engineer/Analyst

RTC:rtc



M. A. Buckmaster, H4-80

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Attachments:

Attachment 1. 200-ZP-1 IRM Phase II Performance Monitoring, Groundwater Results,
January 1997

Attachment 2. Sample Chain of Custody Sheets

Copies:

J. R. Freeman-Pollard, H9-12, w/attachment 1 only

B. H. Ford, H0-02, w/attachment 1 only

I. D. Jacques, H9-10, w/attachment 1 only

R. B. Kerkow, H9-10, w/attachment 1 only

A. M. Hopkins, H9-11, w/attachment 1 only

S. A. Strobe, T7-12, w/attachment 1 only

L. C. Swanson, H9-11, w/attachment 1 only

BHI Document Control, H4-79, w/original attachments

200-ZP-1 Phase II Performance Monitoring
Groundwater Results, January 1997
SAF C97-014 and C97-015

<i>Sample Location</i>	<i>HEIS Number</i>	<i>Sample Date</i>	<i>Analysis Date</i>	<i>Chloroform (µg/L)</i>	<i>Carbon Tetrachloride (µg/L)</i>	<i>Trichloroethylene (µg/L)</i>
299-W15-1	BOJRC4	1/29/97	2/5/97	20	3500	12
299-W15-7	BOJRC5	1/28/97	2/5/97	47	3200	18
Duplicate @ 299-W15-7	BOJRD0	1/28/97	2/5/97	46	3200	18
299-W15-10	BOJRC6	1/27/97	2/5/97	34	4100	14
299-W15-11	BOJRC7	1/27/97	2/5/97	13	740	<2.0
299-W15-26	BOJRC8	1/28/97	2/5/97	70	2700	5.4
299-W15-30	BOJRD6	1/29/97	2/5/97	74	5900	7.4
Duplicate @ 299-W15-30	BOJRD7	1/29/97	2/5/97	79	6500	8.5
299-W15-31A	BOJRD8	1/29/97	2/5/97	57	5100	7.3
299-W15-38	BOJRC9	1/28/97	2/5/97	31	2900	<2.0
299-W18-23	BOJRD9	1/29/97	2/5/97	4.5	610	<2.0
299-W18-28	BOJRF0	1/28/97	2/5/97	16	190	<2.0
699-39-79	BOJRF1	1/28/97	2/5/97	7.5	550	<2.0

j - Value less than practical quantitation limit

VOA Instrument: Hewlett Packard 6890 GC, Serial # 3235A47685

Method: Dual DB-VRX columns, ECD/FID, 1 mL headspace injection

Logbook: 200-ZP-1 Field Logbook, EL-1273, pgs 132 to 134

Analyst:

R.T. Coffman 2/5/97
R.T. Coffman

Analyst:

R.B. Kerkow 2/18/97
R.B. Kerkow

Pacific Northwest National Laboratory	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST						C97-014-1	Page 1 of 1
Collector RR FOX (RFS)	Company Contact J.H. KESSNER		Telephone No. (509) 372-9538		Project Coordinator Stewart, DL		Data Turnaround Field	
Project Designation 200-ZP-1 IRM (Group 1) Groundwater Sampling--FY1997		Sampling Location 200-W			SAF No. C97-014			
Ice Chest No. SNL 276		Field Logbook No. EFL-1111-6 PAGE 66			Method of Shipment Gov. Vehicle			
Shipped To Mobile Laboratory		Offsite Property No. N/A			Bill of Lading/Air Bill No. N/A			
POSSIBLE SAMPLE HAZARDS/REMARKS		Preservation	HCl to pH <2 Cooked to 4C					
		Type of Container	Gs*					
		No. of Container(s)	1					
Special Handling and/or Storage		Volume	40ml					
SAMPLE ANALYSIS			VOA BY FIELD GC -- Chlorinated Hydrocarbon					
Sample No.	Matrix *	Sample Date	Sample Time					
BQJRC4	Water	JAN 29 1997	1240	V				
CHAIN OF POSSESSION		Sign/Print Names		SPECIAL INSTRUCTIONS TOTAL ACTIVITY EXEMPT			Matrix * S - Soil SE - Sediment SO - Solid SL - Sludge W - Water O - Oil A - Air DS - Drum Solids DL - Drum Liquids T - Tissue WI - Wipe L - Liquid V - Vegetation X - Other	
Relinquished By RR FOX (RFS)	Date/Time 1-29-97 1300	Received By RT Coffman / RT Coffman	Date/Time 1-29-97 1300					
Relinquished By	Date/Time	Received By	Date/Time					
Relinquished By	Date/Time	Received By	Date/Time					
Relinquished By	Date/Time	Received By	Date/Time					
LABORATORY SECTION	Received By	Title					Date/Time	
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By					Date/Time	

Pacific Northwest National Laboratory		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST						C97-014-2	Page 1 of 1	
Collector RZ STEFFLER (RFS)		Company Contact J.H. KESSNER		Telephone No. (509) 372-9538		Project Coordinator Stewart, DL		Data Turnaround Field		
Project Designation 200-ZP-1 IRM (Group 1) Groundwater Sampling-FY1997		Sampling Location 200-W		SAF No. C97-014						
Ice Chest No. <i>SML - 545</i>		Field Logbook No. <i>WHC-N-205 #63</i>		Method of Shipment <i>Gov. Vehicle</i>						
Shipped To Mobile Laboratory		Offsite Property No. <i>NA</i>		Bill of Lading/Air Bill No. <i>NA</i>						
POSSIBLE SAMPLE HAZARDS/REMARKS		Preservation	HCl to pH <2 Cooked to 4C							
		Type of Container	Gs*							
		No. of Container(s)	1							
Special Handling and/or Storage		Volume	40ml							
SAMPLE ANALYSIS			VOA BY FIELD GC -- Chlorinated Hydrocarbon							
Sample No.	Matrix *	Sample Date	Sample Time							
B0JRCS	Water	JAN 28 1997	0929	X						
CHAIN OF POSSESSION		Sign/Print Names		SPECIAL INSTRUCTIONS TOTAL ACTIVITY EXEMPT						Matrix * S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air DS = Drum Solids DL = Drum Liquids T = Tissue WI = Wipe L = Liquid V = Vegetation X = Other
Relinquished By RZ STEFFLER (RFS)	Date/Time 1-28-97 1245	Received By <i>R. Coffman</i>	Date/Time 1-28-97 1245							
Relinquished By	Date/Time	Received By	Date/Time							
Relinquished By	Date/Time	Received By	Date/Time							
Relinquished By	Date/Time	Received By	Date/Time							
LABORATORY SECTION	Received By	Title		Date/Time						
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By		Date/Time						

Pacific Northwest National Laboratory		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST								C97-014-7		Page 1 of 1					
Collector RZ STEFFLER (RFS)				Company Contact J.H. KESSNER		Telephone No. (509) 372-9538		Project Coordinator Stewart, DL		Data Turnaround Field							
Project Designation 200-ZP-1 IRM (Group 1) Groundwater Sampling-FY1997				Sampling Location 200-W				SAF No. C97-014									
Ice Chest No. SML-545				Field Logbook No. WHL-N-205 #63				Method of Shipment Hand Carried									
Shipped To Mobile Laboratory				Offsite Property No. NA				Bill of Lading/Air Bill No. NA									
POSSIBLE SAMPLE HAZARDS/REMARKS				Preservation		HCl to pH <2 Cooled to 4C											
				Type of Container		Gs*											
				No. of Container(s)		1											
Special Handling and/or Storage				Volume		40ml											
SAMPLE ANALYSIS						VOA BY FIELD GC - Chlorinated Hydrocarbon											
Sample No.		Matrix *		Sample Date		Sample Time											
BOJRD0		Water		JAN 28 1997		0929		X									
CHAIN OF POSSESSION		Sign/Print Names				SPECIAL INSTRUCTIONS TOTAL ACTIVITY EXEMPT								Matrix *			
Relinquished By RZ STEFFLER (RFS)		Date/Time 1-28-97 1245		Received By RT COFFMAN		Date/Time 1-28-97 1245										S - Soil	
Relinquished By		Date/Time		Received By		Date/Time										SE - Sediment	
Relinquished By		Date/Time		Received By		Date/Time										SO - Solid	
Relinquished By		Date/Time		Received By		Date/Time										SL - Sludge	
																W - Water	
																O - Oil	
																A - Air	
																DS - Drum Solids	
																DL - Drum Liquids	
																T - Tissue	
																WI - Wipe	
																L - Liquid	
																V - Vegetation	
																X - Other	
LABORATORY SECTION		Received By				Title				Date/Time							
FINAL SAMPLE DISPOSITION		Disposal Method				Disposed By				Date/Time							

Pacific Northwest National Laboratory		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST						C97-014-3		Page 1 of 1											
Collector RZ STEFFLER (RFS)				Company Contact J.H. KESSNER		Telephone No. (509) 372-9538		Project Coordinator Stewart, DL		Data Turnaround Field											
Project Designation 200-ZP-1 IRM (Group 1) Groundwater Sampling-FY1997				Sampling Location 200-W		SAF No. C97-014															
Ice Chest No. <i>SMIL-263</i>				Field Logbook No. <i>WHI-N-405#63</i>		Method of Shipment <i>Box 4 + truck</i>															
Shipped To Mobile Laboratory				Offsite Property No. <i>N/A</i>		Bill of Lading/Air Bill No. <i>N/A</i>															
POSSIBLE SAMPLE HAZARDS/REMARKS				Preservation		HCl to pH <2 Cooled to 4C															
				Type of Container		Gs*															
				No. of Container(s)		1															
Special Handling and/or Storage				Volume		40ml															
SAMPLE ANALYSIS						VOA BY FIELD GC - Chlorinated Hydrocarbon															
Sample No.		Matrix *		Sample Date		Sample Time															
BOJRC6		Water		1-27-97		1145		X													
CHAIN OF POSSESSION		Sign/Print Names						SPECIAL INSTRUCTIONS TOTAL ACTIVITY EXEMPT				Matrix * S - Soil SE - Sediment SO - Solid SL - Sludge W - Water O - Oil A - Air DS - Drum Solids DL - Drum Liquids T - Tissue WI - Wipe L - Liquid V - Vegetation X - Other									
														Relinquished By		Date/Time		Received By		Date/Time	
														RZ STEFFLER (RFS)		1-27-97 1218		<i>R.B. KESSNER</i>		1/27/97	
														Relinquished By		Date/Time		Received By		Date/Time	
														Relinquished By		Date/Time		Received By		Date/Time	
Relinquished By		Date/Time		Received By		Date/Time															
LABORATORY SECTION		Received By						Title				Date/Time									
FINAL SAMPLE DISPOSITION		Disposal Method						Disposed By				Date/Time									

Matrix *	
S	= Soil
SE	= Sediment
SO	= Solid
SL	= Sludge
W	= Water
O	= Oil
A	= Air
DS	= Drum Solids
DL	= Drum Liquids
T	= Tissue
WI	= Wipe
L	= Liquid
V	= Vegetation
X	= Other

Pacific Northwest National Laboratory		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST								C97-014-5		Page 1 of 1	
Collector RR FOX (RFS)		Company Contact J.H. KESSNER		Telephone No. (509) 372-9538		Project Coordinator Stewart, DL		Data Turnaround Field					
Project Designation 200-ZP-1 IRM (Group 1) Groundwater Sampling--FY1997		Sampling Location 200-W				SAF No. C97-014							
Ice Chest No. SUL 276		Field Logbook No. FFL-1111-G PAGE 64				Method of Shipment Gov. Vehicle							
Shipped To Mobile Laboratory		Offsite Property No. N/A				Bill of Lading/Air Bill No. N/A							
POSSIBLE SAMPLE HAZARDS/REMARKS		Preservation		HCl to pH <2 Cooked to 4C									
		Type of Container		Gs*									
		No. of Container(s)		1									
Special Handling and/or Storage		Volume		40ml									
SAMPLE ANALYSIS				VOA BY FIELD GC - Chlorinated Hydrocarbon									
Sample No.	Matrix *	Sample Date	Sample Time										
BOJRC8	Water	JAN 28 1997	1230	/									
CHAIN OF POSSESSION				Sign/Print Names				SPECIAL INSTRUCTIONS TOTAL ACTIVITY EXEMPT				Matrix *	
Relinquished By RR FOX (RFS)		Date/Time 1-28-97	Received By RT Coffman / RT Coffman		Date/Time 1-28-97						S - Soil		
Relinquished By		Date/Time	Received By		Date/Time						SE - Sediment		
Relinquished By		Date/Time	Received By		Date/Time						SO - Solid		
Relinquished By		Date/Time	Received By		Date/Time						SL - Sludge		
Relinquished By		Date/Time	Received By		Date/Time						W - Water		
Relinquished By		Date/Time	Received By		Date/Time						O - Oil		
Relinquished By		Date/Time	Received By		Date/Time						A - Air		
Relinquished By		Date/Time	Received By		Date/Time						DS - Drum Solids		
Relinquished By		Date/Time	Received By		Date/Time						DL - Drum Liquids		
Relinquished By		Date/Time	Received By		Date/Time						T - Tissue		
Relinquished By		Date/Time	Received By		Date/Time						WI - Wipe		
Relinquished By		Date/Time	Received By		Date/Time						L - Liquid		
Relinquished By		Date/Time	Received By		Date/Time						V - Vegetation		
Relinquished By		Date/Time	Received By		Date/Time						X - Other		
LABORATORY SECTION		Received By		Title								Date/Time	
FINAL SAMPLE DISPOSITION		Disposal Method				Disposed By						Date/Time	

Pacific Northwest National Laboratory	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST						C97-015-1	Page 1 of 1
Collector RR FOX (RFS)	Company Contact J.H. KESSNER		Telephone No. (509) 372-9538		Project Coordinator Stewart, DL		Data Turnaround Field	
Project Designation 200-ZP-1 IRM (Group 2) Groundwater Sampling-FY1997		Sampling Location 200-W		SAF No. C97-015				
Ice Chest No. SINK 276		Field Logbook No. EFL-1111-G PAGE 65		Method of Shipment GOV - Vehicle				
Shipped To Mobile Laboratory		Offsite Property No. N/A		Bill of Lading/Air Bill No. N/A				
POSSIBLE SAMPLE HAZARDS/REMARKS		Preservation	HCl to pH <2 Cooled to 4C					
		Type of Container	Gs*					
		No. of Container(s)	1					
Special Handling and/or Storage		Volume	40ml					
SAMPLE ANALYSIS			VOA BY FIELD GC - Chlorinated Hydrocarbon					
Sample No.	Matrix *	Sample Date	Sample Time					
BOJRD6	Water	JAN 29 1997	1034	✓				
CHAIN OF POSSESSION		Sign/Print Names		SPECIAL INSTRUCTIONS TOTAL ACTIVITY EXEMPT				Matrix * S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air DS = Drum Solids DL = Drum Liquids T = Tissue WI = Wipe L = Liquid V = Vegetation X = Other
Relinquished By RR FOX (RFS)	Date/Time 1-29-97 1300	Received By RT Coffman / RT Coffman	Date/Time 1-29-97 1300					
Relinquished By	Date/Time	Received By	Date/Time					
Relinquished By	Date/Time	Received By	Date/Time					
Relinquished By	Date/Time	Received By	Date/Time					
LABORATORY SECTION	Received By	Title		Date/Time				
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By		Date/Time				

Pacific Northwest National Laboratory		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST						C97-015-2		Page 1 of 1									
Collector RR FOX (RFS)			Company Contact J.H. KESSNER		Telephone No. (509) 372-9538		Project Coordinator Stewart, DL		Data Turnaround Field										
Project Designation 200-ZP-1 IRM (Group 2) Groundwater Sampling--FY1997			Sampling Location 200-W			SAF No. C97-015													
Ice Chest No. <i>Sink 236</i>			Field Logbook No. <i>EFL 1111-G PAGE 65</i>			Method of Shipment <i>Gov. Vehicle</i>													
Shipped To Mobile Laboratory			Offsite Property No. <i>N/A</i>			Bill of Lading/Air Bill No. <i>N/A</i>													
POSSIBLE SAMPLE HAZARDS/REMARKS			Preservation		HCl to pH <2 Cooled to 4C														
			Type of Container		Gs*														
			No. of Container(s)		1														
Special Handling and/or Storage			Volume		40ml														
SAMPLE ANALYSIS					VOA BY FIELD GC -- Chlorinated Hydrocarbon														
Sample No.	Matrix *	Sample Date	Sample Time																
BOJRD7	Water	JAN 29 1997	1039	✓															
CHAIN OF POSSESSION		Sign/Print Names				SPECIAL INSTRUCTIONS TOTAL ACTIVITY EXEMPT													
Relinquished By RR FOX (RFS)	Date/Time 1300 1-29-97	Received By <i>RT Coffman</i>	Date/Time 1300 1-29-97	<div style="float: right; text-align: right;"> Matrix * S - Soil SE - Sediment SO - Solid SL - Sludge W - Water O - Oil A - Air DS - Drum Solids DL - Drum Liquids T - Tissue WI - Wipe L - Liquid V - Vegetation X - Other </div>															
Relinquished By	Date/Time	Received By	Date/Time																
Relinquished By	Date/Time	Received By	Date/Time																
Relinquished By	Date/Time	Received By	Date/Time																
LABORATORY SECTION		Received By				Title													
FINAL SAMPLE DISPOSITION		Disposal Method				Disposed By				Date/Time									

Pacific Northwest National Laboratory		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST						C97-015-3		Page 1 of 1			
Collector RR FOX (RFS)				Company Contact J.H. KESSNER		Telephone No. (509) 372-9538		Project Coordinator Stewart, DL		Data Turnaround Field			
Project Designation 200-ZP-1 IRM (Group 2) Groundwater Sampling--FY1997				Sampling Location 200-W		SAF No. C97-015							
Ice Chest No. Small 224				Field Logbook No. EFL-1111-6 PAGES 65-66		Method of Shipment Coal. Vehicle							
Shipped To Mobile Laboratory				Offsite Property No. N/A		Bill of Lading/Air Bill No. N/A							
POSSIBLE SAMPLE HAZARDS/REMARKS				Preservation		HCl to pH <2 Cooled to AC							
				Type of Container		Gs*							
				No. of Container(s)		1							
Special Handling and/or Storage				Volume		40ml							
SAMPLE ANALYSIS						VOA BY FIELD GC - Chlorinated Hydrocarbon							
Sample No.		Matrix *		Sample Date		Sample Time							
BOJRD8		Water		JAN 29 1997		1151		✓					
CHAIN OF POSSESSION		Sign/Print Names						SPECIAL INSTRUCTIONS TOTAL ACTIVITY EXEMPT					
		Relinquished By RR FOX (RFS)		Date/Time 1-300		Received By RT Coffman						Date/Time 1-29-97	
		Relinquished By		Date/Time		Received By						Date/Time	
		Relinquished By		Date/Time		Received By						Date/Time	
		Relinquished By		Date/Time		Received By						Date/Time	
LABORATORY SECTION		Received By						Date/Time					
		Disposal Method						Disposed By					
FINAL SAMPLE DISPOSITION		Disposal Method						Disposed By					
		Disposal Method						Disposed By					

Pacific Northwest National Laboratory		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST						C97-014-6		Page 1 of 1	
Collector RR FOX (RFS)				Company Contact J.H. KESSNER		Telephone No. (509) 372-9538		Project Coordinator Stewart, DL		Data Turnaround Field	
Project Designation 200-ZP-1 IRM (Group 1) Groundwater Sampling--FY1997				Sampling Location 200-W		SAF No. C97-014					
Ice Chest No. S24L 276				Field Logbook No. EFL-1111-6 PAGES 63-4		Method of Shipment 60°. Vehicle					
Shipped To Mobile Laboratory				Offsite Property No. N/A		Bill of Lading/Air Bill No. N/A					
POSSIBLE SAMPLE HAZARDS/REMARKS				Preservation		HCl to pH <2 Cooled to 4C					
				Type of Container		Gs*					
				No. of Container(s)		1					
Special Handling and/or Storage				Volume		40ml					
SAMPLE ANALYSIS						VOA BY FIELD GC - Chlorinated Hydrocarbon					
Sample No.		Matrix *		Sample Date		Sample Time					
B0JRC9		Water		JAN 28 1997		1103					
CHAIN OF POSSESSION				Sign/Print Names				SPECIAL INSTRUCTIONS TOTAL ACTIVITY EXEMPT			
Relinquished By RR FOX (RFS)		Date/Time 1/300 1-28-97		Received By RT Coffman		Date/Time 1/300 1-28-97		Matrix * S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air DS = Drum Solids DL = Drum Liquids T = Tissue WI = Wipe L = Liquid V = Vegetation X = Other			
Relinquished By		Date/Time		Received By		Date/Time					
Relinquished By		Date/Time		Received By		Date/Time					
Relinquished By		Date/Time		Received By		Date/Time					
LABORATORY SECTION		Received By		Title				Date/Time			
FINAL SAMPLE DISPOSITION		Disposal Method		Disposed By				Date/Time			

Laboratory		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST						C97-015-4		Page 1 of 1		
Collector RF THORNTON (RFS)				Company Contact J.H. KESSNER		Telephone No. (509) 372-9538		Project Coordinator Stewart, DL		Data Turnaround Field		
Project Designation 200-ZP-1 IRM (Group 2) Groundwater Sampling-FY1997				Sampling Location 200-W		SAF No. C97-015						
Ice Chest No. 325 RT 1-29-97 S7C - 154				Field Logbook No. EPL-1112-S		Method of Shipment CONT VIE 14						
Shipped To Mobile Laboratory				Offsite Property No.		Bill of Lading/Air Bill No.						
POSSIBLE SAMPLE HAZARDS/REMARKS				Preservation	HCl to pH <2 Cooled to 4C							
				Type of Container	Gs*							
				No. of Container(s)	1							
Special Handling and/or Storage				Volume	40ml							
SAMPLE ANALYSIS					VOA BY FIELD GC - Chlorinated Hydrocarbon							
Sample No.	Matrix *	Sample Date	Sample Time									
80JRD9	Water	1-29-97	10912	X								
CHAIN OF POSSESSION				Sign/Print Names		SPECIAL INSTRUCTIONS TOTAL ACTIVITY EXEMPT						
Relinquished By RF THORNTON (RFS)	Date/Time 1-29-97	Received By R.R. Fox	Date/Time 1-29-97									
Relinquished By R.R. Fox	Date/Time 1-29-97	Received By R.R. Fox	Date/Time 1-29-97									
Relinquished By	Date/Time	Received By	Date/Time									
Relinquished By	Date/Time	Received By	Date/Time									
LABORATORY SECTION				Received By		Title		Date/Time				
FINAL SAMPLE DISPOSITION				Disposal Method		Disposed By		Date/Time				

Matrix *

- S = Soil
- SE = Sediment
- SO = Solid
- SL = Sludge
- W = Water
- O = Oil
- A = Air
- DS = Drum Solids
- DL = Drum Liquids
- T = Tissue
- WI = Wipe
- L = Liquid
- V = Vegetation
- X = Other

Pacific Northwest National Laboratory		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST										C97-015-5		Page 1 of 1					
Collector RZ STEFFLER (RFS)				Company Contact J.H. KESSNER				Telephone No. (509) 372-9538				Project Coordinator Stewart, DL			Data Turnaround Field				
Project Designation 200-ZP-1 IRM (Group 2) Groundwater Sampling--FY1997				Sampling Location 200-W				SAF No. C97-015											
Ice Chest No. SML-545				Field Logbook No. WHC-N-205 #63				Method of Shipment Gov Vehicle											
Shipped To Mobile Laboratory				Offsite Property No. NA				Bill of Lading/Air Bill No. NA											
POSSIBLE SAMPLE HAZARDS/REMARKS				Preservation		HCl to pH <2 Cooled to 4C													
				Type of Container		Gs*													
				No. of Container(s)		1													
Special Handling and/or Storage				Volume		40ml													
SAMPLE ANALYSIS						VOA BY FIELD GC - Chlorinated Hydrocarbon													
Sample No.		Matrix *		Sample Date		Sample Time													
BOJRF0		Water		JAN 28 1997		10:30		X											
CHAIN OF POSSESSION		Sign/Print Names						SPECIAL INSTRUCTIONS TOTAL ACTIVITY EXEMPT								Matrix * S - Soil SE - Sediment SO - Solid SL - Sludge W - Water O - Oil A - Air DS - Drum Solids DL - Drum Liquids T - Tissue WI - Wipe L - Liquid V - Vegetation X - Other			
Relinquished By		Date/Time		Received By		Date/Time													
<i>R. Z. Steffler</i>		1-28-97 1245																	
Relinquished By		Date/Time		Received By		Date/Time													
Relinquished By		Date/Time		Received By		Date/Time													
Relinquished By		Date/Time		Received By		Date/Time													
LABORATORY SECTION		Received By						Title						Date/Time					
FINAL SAMPLE DISPOSITION		Disposal Method						Disposed By						Date/Time					

Pacific Northwest National Laboratory		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST						C97-015-6		Page 1 of 1						
Collector RZ Steffler (RFS)			Company Contact J.H. KESSNER		Telephone No. (509) 372-9538		Project Coordinator Stewart, DL		Data Turnaround Field							
Project Designation 200-ZP-1 IRM (Group 2) Groundwater Sampling-FY1997			Sampling Location 200-W		SAF No. C97-015											
Ice Chest No. SML-545			Field Logbook No. WHC-N-205 # 63		Method of Shipment Hand Carried											
Shipped To Mobile Laboratory			Offsite Property No. NA		Bill of Lading/Air Bill No. NA											
POSSIBLE SAMPLE HAZARDS/REMARKS			Preservation		HCl to pH <2 Cooked to 4C											
			Type of Container		Gs*											
			No. of Container(s)		1											
Special Handling and/or Storage			Volume		40ml											
SAMPLE ANALYSIS					VOA BY FIELD GC - Chlorinated Hydrocarbon											
Sample No.		Matrix *	Sample Date	Sample Time												
BOJRF1		Water	1-28-97	1111	X											
CHAIN OF POSSESSION		Sign/Print Names				SPECIAL INSTRUCTIONS TOTAL ACTIVITY EXEMPT						Matrix * S - Soil SE - Sediment SO - Solid SL - Sludge W - Water O - Oil A - Air DS - Drum Solids DL - Drum Liquids T - Tissue WI - Wipe L - Liquid V - Vegetation X - Other				
													Relinquished By	Date/Time	Received By	Date/Time
													RZ STEFFLER (RFS)	1-28-97	RZ Steffler	1-28-97
													Relinquished By	Date/Time	Received By	Date/Time
													Relinquished By	Date/Time	Received By	Date/Time
LABORATORY SECTION		Received By		Title				Date/Time								
FINAL SAMPLE DISPOSITION		Disposal Method		Disposed By				Date/Time								